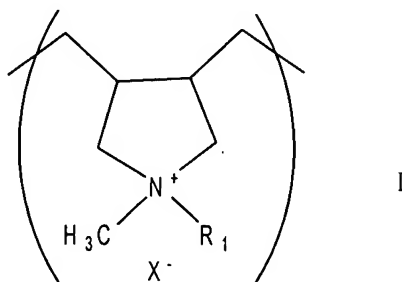


Please amend the claims as follows:

1. (Currently amended) Water soluble branched block copolymers that comprise polymeric backbone chains of quaternary ammonium units of general formula I

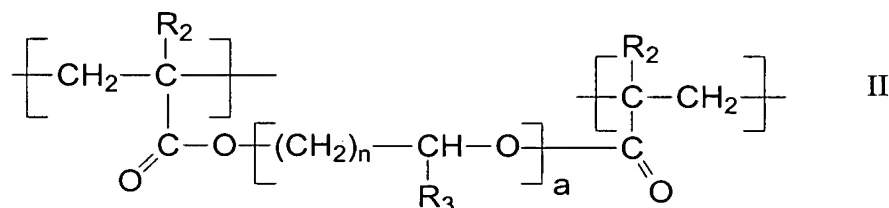


with

$R_1 = \text{H, alkyl (C}_1\text{-C}_8\text{)-}$

$X^- = \text{a suitable counterion,}$

whereby the backbone chains are mutually linked together by way of the feature that poly(alkylene glycol) blocks, which comprise units of general formula II



with

$R_2 = \text{H, methyl,}$

$R_3 = \text{H, methyl, ethyl,}$

~~$X^- = \text{a suitable counterion}$~~

$n = 1 \text{ through } 3, \text{ and}$

$a = 6 \text{ through } 100,$

replace individual units of general formula I, and the proportion by mass of the units of general formula II is between 0.01 and 20 % by weight based on the total block copolymer.

2. (Previously presented) A block copolymer in accordance with claim 1, wherein the molar mass of the block copolymer is greater than, or equal to, 250,000 g/mol, and especially preferably greater than, or equal to, 1,000,000 g/mol.

3. (Previously presented) A block copolymer in accordance with claim 1 wherein the intrinsic viscosity of the block copolymer is between 25 and 600 ml/g when

measured in 1 N sodium chloride solution at 30 °C.

4. (Previously presented) A block copolymer in accordance with claim 3, wherein the intrinsic viscosity of the block copolymer is between 400 and 600 ml/g.

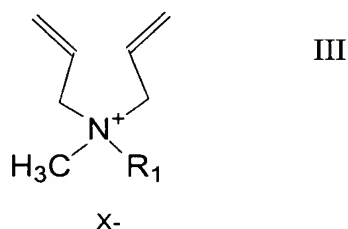
5. (Previously presented) A block copolymer in accordance with claim 1 wherein the Huggins constant is in the range between 0.3 and 0.5.

6. (Previously presented) A block copolymer in accordance with claim 1 wherein the polymeric backbone chain is derived, in the form of a unit of general formula I, from cyclic quaternary ammonium chlorides.

7. (Previously presented) A block copolymer in accordance with claim 1 wherein the poly(alkylene glycol) blocks are derived from compounds from the group of bis-acrylate esters or bis-methacrylate esters of poly(ethylene glycols), poly(propylene glycols), poly(butylene glycols), and/or polytetrahydrofurans.

8. (Currently amended) A block copolymer in accordance with claim 1 wherein the counterions  $X^-$  are selected ~~independently of one another~~ from the group comprising chloride and methosulfate.

9. (Currently amended) A process for the preparation of water soluble branched block copolymers via the [free] radical polymerization of a quaternary diallylammonium compound of general formula III,

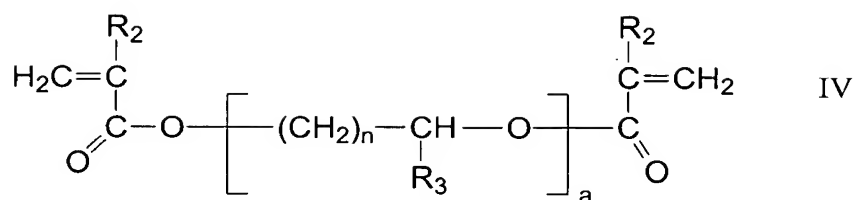


with

$R_1 = H, \text{ alkyl } (C_1-C_8)$

$X^-$  = a suitable counterion,

and bis-acrylate esters or bis-methacrylate esters of poly(alkylene glycols) of general formula IV,



with

R<sub>2</sub> = H, methyl,

R<sub>3</sub> = H, methyl, ethyl,

~~X<sup>-</sup> = a suitable counterion,~~

n = 1 through 3, and

a = 6 through 100,

whereby the proportion by mass of the compound of general formula IV amounts to between 0.01 and 20 % by weight based on the two starting compounds.

10. (Previously presented) A process in accordance with claim 9, wherein diallyldimethylammonium chloride is used as the diallylammonium compound.

11. (Previously presented) A process in accordance with claim 9 wherein compounds from the group of bis-acrylate esters or bis-methacrylate esters of poly(ethylene glycols), poly(propylene glycols), poly(butylene glycols), and/or polytetrahydrofurans are used as the poly(alkylene glycol).

12. (Previously presented) A process in accordance with claim 9 wherein, as the initiator, use is made of a water soluble azo compound, or a redox system comprising peroxodisulfates and an amine.

13. (Previously presented) A process in accordance with claim 12, wherein, as the initiator, use is made of a redox system comprising peroxodisulfates and an alkoxyated amine surfactant.

14. (Previously presented) A process in accordance with claim 9 wherein the poly(alkylene glycol) is added during polymerization of the quaternary diallylammonium compound within the 0 to 80 % range of extents of reaction either in the form of one shot, or in portions, or continuously.

15. (Previously presented) A process in accordance with claim 9 wherein the process takes place in aqueous solution.

16. (Currently amended) A process in accordance with claim 9 wherein the

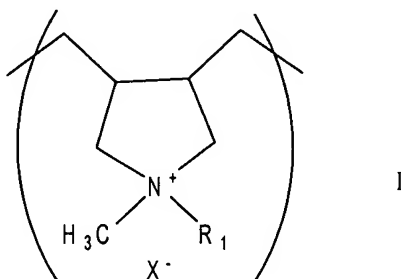
process takes place using ~~the~~ an inverse emulsion procedure.

17-18. (Cancelled)

19. (Previously presented) A block copolymer in accordance with claim 2 wherein the intrinsic viscosity of the block copolymer is between 25 and 600 ml/g when measured in 1 N sodium chloride solution at 30 °C.

20. (Previously presented) A block copolymer in accordance with claim 19 wherein the intrinsic viscosity of the block copolymer is between 400 and 600 ml/g.

21. (New) A method of making at least one of a coagulating agent and a flocculating agent for the separation of suspended solids, the method comprising providing water soluble branched block copolymers that comprise polymeric backbone chains of quaternary ammonium units of general formula I

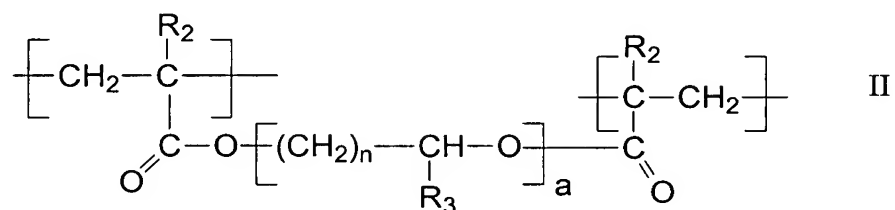


with

$R_1 = \text{H, alkyl (C}_1\text{-C}_8\text{)}$

$X^- = \text{a counterion,}$

whereby the backbone chains are mutually linked together by way of the feature that poly(alkylene glycol) blocks, which comprise units of general formula II



with

$R_2 = \text{H, methyl,}$

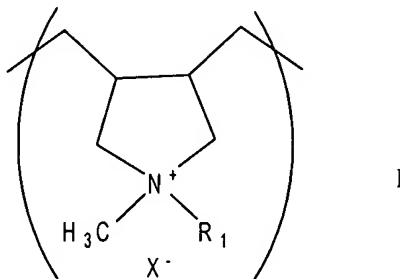
$R_3 = \text{H, methyl, ethyl,}$

$n = 1 \text{ through } 3, \text{ and}$

$a = 6 \text{ through } 100,$

replace individual units of general formula I, and the proportion by mass of the units of general formula II is between 0.01 and 20 % by weight based on the total block copolymer.

22. (New) A method for at least one of the manufacture of paper, the treatment of waste water, and the removal of water from sludge comprising providing water soluble branched block copolymers that comprise polymeric backbone chains of quaternary ammonium units of general formula I

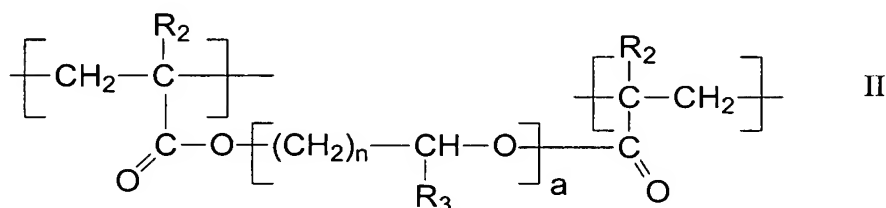


with

$R_1 = \text{H, alkyl (C}_1\text{-C}_8\text{)}$

$X^- = \text{a counterion,}$

whereby the backbone chains are mutually linked together by way of the feature that poly(alkylene glycol) blocks, which comprise units of general formula II



with

$R_2 = \text{H, methyl,}$

$R_3 = \text{H, methyl, ethyl,}$

$n = 1 \text{ through } 3, \text{ and}$

$a = 6 \text{ through } 100,$

replace individual units of general formula I, and the proportion by mass of the units of general formula II is between 0.01 and 20 % by weight based on the total block copolymer.